

Claims

What is claimed:

1 1. A method for calculating the amount of marking material
2 required to print a print job, comprising the steps of:
3 transmitting a print job to a server;
4 copying the print job; and
5 as a first task:
6 processing the print job including at least selecting an image-forming
7 device for the print job; and
8 transmitting the print job to the selected image-forming device; and
9 as a second, separate task utilizing the copy of the print job, calculating the
10 amount of marking material required to print the print job.

1 2. The method of Claim 1 wherein the print job is converted to a
2 universal file format file prior to being transmitted to the server.

1 3. The method of Claim 2 wherein the step of calculating the
2 amount of marking material required to print the print job includes the steps of:
3 converting the copy of the universal file format file to raster data;
4 counting the number of image elements contained in the print job; and
5 calculating the amount of marking material required to print the print job
6 using a known amount of marking material for printing an individual image element.

1 4. The method of Claim 2 wherein the universal file format
2 comprises Portable Document Format.

1 5. The method of Claim 2 wherein the step of processing the print
2 job includes converting the universal file format file to a page description language
3 (PDL) file.

1 6. The method of Claim 1 wherein the step of calculating the

amount of marking material required to print the print job includes the steps of:
converting the copy of the print job to raster data;
counting the number of image elements contained in the print job; and
calculating the amount of marking material required to print the print
job using a known amount of marking material for printing an individual image
element.

7. The method of Claim 1 wherein the first and second tasks are
performed by the server in parallel.

8. The method of Claim 1 wherein the second task is performed
by the server in the server background.

9. The method of Claim 1 wherein the marking material comprises
toner for use in a laser printer.

10. The method of Claim 1 wherein the marking material comprises
ink for use in an ink jet printer.

11. In a computer network including a host computer, a print server
and at least one image-forming device wherein a marking material is used for
creating images on a print media, a method for calculating the amount of marking
material required to print a print job submitted by a user, comprising the steps of:

converting a print job to a universal file format file;

transmitting a the universal file format file to a print server;

copying the universal file format file; and

as a first task:

converting the universal file format file to a page description language
(PDL) file;

processing the print job PDL file including at least selecting an image-
forming device for the print job; and

transmitting the print job to the selected image-forming device; and

as a second, separate task utilizing the copy of the universal file format file:

- converting the universal file format file to raster data;
- counting the number of image elements contained in the print job; and
- calculating the amount of marking material required to print the print job using a predetermined amount of marking material for printing an individual image element.

12. The method of Claim 11 wherein the first and second tasks are performed by the server in parallel.

13. The method of Claim 11 wherein the second task is performed by the server in the server background.

14. The method of Claim 11 wherein the marking material comprises toner for use in a laser printer.

15. The method of Claim 11 wherein the marking material comprises ink for use in an ink jet printer.

16. In a computer network, a print server comprising:
 copying means for copying a received print job;
 a calculation module adapted to calculate, using the copied print job,
 the amount of marking material required to print the print job; and
 processing circuitry for processing the print job and transmitting the
 processed print job to a desired imaging device.

17. The print server of Claim 16 wherein the received print job comprises print data file having a universal file format.

18. The print server of Claim 17 further comprising a file conversion module for converting universal file format print data file to a page description language file associated with the desired imaging device.

1 19. The print server of Claim 16 wherein the marking material
2 comprises toner for use in a laser printer.

1 20. The print server of Claim 16 wherein the marking material
2 comprises ink for use in an ink jet printer.

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